UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,901	12/23/2004	Claudia Becker	P08514US00/RFH	6601

881   7590   01/30/2009
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EXAMINER
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ART UNIT	PAPER NUMBER
2443	

MAIL DATE	DELIVERY MODE
01/30/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/518,901	BECKER ET AL.
	Examiner	Art Unit	
	MARK D. FEARER	2443	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>14 November 2009</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-24</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's Amendment filed 14 November 2008 is acknowledged.

2. Claims 1-21 have been amended.

3. Claims 1-24 are still pending in the present application.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a
> whole would have been obvious at the time the invention was made to a person having
> ordinary skill in the art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

> 1.   Determining the scope and contents of the prior art.
> 2.   Ascertaining the differences between the prior art and the claims at issue.
> 3.   Resolving the level of ordinary skill in the pertinent art.
> 4.   Considering objective evidence present in the application indicating obviousness
> or nonobviousness.

This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5.   Claims 1-14 and 22-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Urien (US 7130910 B2) in view of Maillard et al. (US 20020129249

A1).

        Consider claim 1. Urien discloses a protocol for adapting the degree of

interactivity between a participant equipment item and a reciprocal participant

equipment item of a set of participant equipment items, when this participant equipment

item and this reciprocal participant equipment item are subjected to an interactive

dialogue, wherein it consists at least: in writing, into said participant equipment item, a

list of reciprocal participant equipment identifiers (column 9 lines 46-63); in writing, into

said participant equipment item, at least one association between an equipment

identifier and a behavior identifier and, in order to execute this interactive dialogue,

when this participant equipment item and at least one reciprocal participant equipment

item are in each other's presence (column 6 lines 25-52); in carrying out a procedure of

authentication between said participant equipment item and said reciprocal participant

equipment item, and in searching for the identifier of the authenticated reciprocal

participant equipment item in said list of identifiers; in reading said associated behavior

identifier; in applying, at the participant equipment item, a behavior relative to the

authenticated reciprocal participant equipment item, this behavior being selected as a

function of the result of the authentication procedure and associated with the behavior

identifier and with the identifier of the reciprocal participant equipment item (column 5

line 57 – column 6 line 5). However, Urien fails to disclose a list of behavior identifiers.

Maillard et al. discloses a smartcard for use with a receiver of encrypted broadcast

signals, and receiver comprising a list of behavior identifiers, said behaviors being

relevant in said interactive dialogue (paragraph 0053).

Therefore, it would have been obvious for a person of ordinary skill in the art at

the time the invention was made to incorporate a smartcard for use with a receiver of

encrypted broadcast signals, and receiver comprising a list of behavior identifiers, said

behaviors being relevant in said interactive dialogue as taught by Maillard et al. with a

protocol for adapting the degree of interactivity between a participant equipment item

and a reciprocal participant equipment item of a set of participant equipment items,

when this participant equipment item and this reciprocal participant equipment item are

subjected to an interactive dialogue, wherein it consists at least: in writing, into said

participant equipment item, a list of reciprocal participant equipment identifiers; in

writing, into said participant equipment item, at least one association between an

equipment identifier and a behavior identifier and, in order to execute this interactive

dialogue, when this participant equipment item and at least one reciprocal participant

equipment item are in each other's presence; in carrying out a procedure of

authentication between said participant equipment item and said reciprocal participant

equipment item, and in searching for the identifier of the authenticated reciprocal

participant equipment item in said list of identifiers; in reading said associated behavior

identifier; in applying, at the participant equipment item, a behavior relative to the

authenticated reciprocal participant equipment item, this behavior being selected as a

function of the result of the authentication procedure and associated with the behavior

identifier and with the identifier of the reciprocal participant equipment item as taught by

Urien for the purpose of smartcard applications.

Consider claim 2, as applied to claim 1. Urien, as modified by Maillard et al.,

discloses a protocol, wherein, in the event of a negative response to the step of

searching for the identifier of the authenticated reciprocal participant equipment item in

the list of identifiers, said protocol consists in calling and applying a default behavior

procedure that is selected as a function of the result of said authentication procedure

(Maillard et al., paragraph 0106).

Consider claim 3, as applied to claim 1. Urien, as modified by Maillard et al.,

discloses a protocol, wherein said procedure of authentication between the participant

equipment item and the reciprocal participant equipment item is a procedure at more

than one authentication level (Maillard et al., paragraphs 0233 and 0292).

Consider claim 4, as applied to claim 1. Urien, as modified by Maillard et al.,

discloses a protocol for reciprocally adapting the interactivity between a participant

equipment item and a reciprocal participant equipment item of a set of participant

equipment items, when this participant equipment item and this reciprocal participant equipment item are subjected to an interactive dialogue, wherein it consists: a) in writing, into each participant equipment item and into each reciprocal participant equipment item, respectively, a list of identifiers of reciprocal participant equipment items and participant equipment items, respectively; b) in writing, into each participant equipment item and into each reciprocal participant equipment item, respectively, a list of behavior identifiers, said behaviors being defined in said interactive dialogue; c) in writing at least one association between an equipment identifier and a behavior identifier into each participant equipment item and each reciprocal participant equipment item, each participant equipment item and each reciprocal participant equipment item, respectively, having at least one association between an identifier of reciprocal participant equipment items and a behavior identifier, respectively between an identifier of participant equipment items and a behavior identifier (Urien, column 11 lines 63-67); and, in order to execute this interactive dialogue, when a participant equipment item and a reciprocal participant equipment item are in each other's presence, d) in carrying out a procedure of reciprocal authentication between said participant equipment item and said reciprocal participant equipment item (Urien, column 12 lines 28-36); and e) in searching for the identifier of the authenticated reciprocal participant equipment item and of the authenticated participant equipment item, respectively, in said lists of identifiers (Maillard et al., paragraph 0292); f) in reading at least said associated behavior identifier in the participant equipment item and in the reciprocal participant equipment item, respectively; g) in applying, independently, at the authenticated

participant equipment item and the authenticated reciprocal participant equipment item,

respectively, a behavior relative to the authenticated reciprocal participant equipment

item and the authenticated participant equipment item, respectively, this behavior being

selected as a function of the result of the authentication procedure and associated with

the behavior identifier and with the identifier of the reciprocal participant equipment item

and with the behavior identifier, respectively, and with the identifier of the participant

equipment item (Urien, column 12 lines 1-10).

Consider claim 5, as applied to claim 1. Urien, as modified by Maillard et al.,

discloses a protocol wherein said participant equipment item comprises, stored in a

non-volatile memory, at least: a list of identifiers of reciprocal participant equipment

items, one of the list elements of which designates the identifier of said reciprocal

participant equipment item; a list of identifiers of the behaviors of said participant

equipment item relative to a reciprocal participant equipment item, said list comprising

at least one element forming a behavior reference of interactive dialogue acceptance, of

interactive dialogue refusal or of interactive dialogue conditional acceptance; a list of

associations between an equipment identifier and a behavior identifier, said list of

associations allowing an element of the list of identifiers of reciprocal participant

equipment items and an element of the list of behavior identifiers to be brought into

correspondence with each other (Urien, column 12 line 52 – column 13 line 5).

Consider claim 6, as applied to claim 4. Urien, as modified by Maillard et al.,
discloses a protocol wherein said reciprocal participant equipment item comprises,
stored in a non-volatile memory, at least: a list of identifiers of participant equipment
items, one of the list elements of which designates the identifier of said reciprocal
participant equipment item; a list of identifiers of the behaviors of said reciprocal
participant equipment item relative to a participant equipment item, said list comprising
at least one element forming a behavior reference of interactive dialogue acceptance, of
interactive dialogue refusal or of interactive dialogue conditional acceptance; a list of
associations between an equipment identifier and a behavior identifier, said list of
associations allowing an element of the list of identifiers of participant equipment items
and an element of the list of behavior identifiers to be brought into correspondence with
each other (Maillard et al., paragraph 0292).

Consider claim 7, as applied to claim 1. Urien, as modified by Maillard et al.,
discloses a protocol wherein said participant equipment item is formed by a terminal,
provided with a microprocessor card reader, said reciprocal participant equipment item
being formed by a microprocessor card (Urien, column 3 lines 18-34).

Consider claim 8, as applied to claim 7. Urien, as modified by Maillard et al.,
discloses a protocol wherein said participant equipment item is formed by a terminal for
descrambling scrambled information, said scrambled information being transmitted in

point-to-multipoint mode from an emission center, access to this information being

controlled from access control messages containing the cryptogram of a control word

and access criteria that are transmitted periodically with the scrambled information, and

said reciprocal participant equipment item being formed by a dedicated microprocessor

card, serving as an access control module, comprising at least one security processor

and a secure, programmable, non-volatile memory comprising written access rights,

said written access rights being managed from messages for managing the access

rights transmitted with the scrambled information, said access to this information being

controlled by verifying the identity of at least one access control right that is written into

the card and of one of the access criteria, and by deciphering, in said reciprocal

participant equipment item of the cryptogram, the control word from an operating key, in

order to restore the control word, allowing the scrambled information to be descrambled

in said participant equipment item from this restored control word, in said participant

equipment item, said at least one element forming a behavior reference of interactive

dialogue acceptance is formed by a list of behaviors relative to reciprocal participant

equipment items that are authorized to initiate said interactive dialogue; said at least

one element forming a behavior reference of interactive dialogue refusal is formed by a

list of behaviors relative to reciprocal participant equipment items that are authorized to

initiate said interactive dialogue, from which the facility to initiate said interactive

dialogue has been withdrawn (Urien, column 13 lines 18-28).

Consider claim 9, as applied to claim 8. Urien, as modified by Maillard et al., discloses a protocol wherein, in said reciprocal participant equipment item, said at least one element forming a behavior reference of interactive dialogue acceptance is formed by a list of behaviors relative to participant equipment items that are authorized to initiate said interactive dialogue; said at least one element forming a behavior reference of interactive dialogue refusal is formed by a list of behaviors relative to participant equipment items that are authorized to initiate said interactive dialogue, from which the facility to initiate said interactive dialogue has been withdrawn (Maillard et al., paragraph 0106).

Consider claim 10, as applied to claim 5. Urien, as modified by Maillard et al., discloses a protocol wherein said at least one element forming a reference of interactive dialogue conditional acceptance is formed by a list, at least one of the elements of which is representative of a functional behavior of said reciprocal participant equipment item and of said participant equipment item, respectively (Maillard et al., paragraph 0106).

Consider claim 11, as applied to claim 5. Urien, as modified by Maillard et al., discloses a protocol wherein said at least one element forming a reference of interactive dialogue conditional acceptance is formed by a list (Maillard et al., paragraph 0106), at least one of the elements of which is representative of a personal behavior of the user

of said reciprocal participant equipment item and of said participant equipment item,

respectively (Urien, column 11 lines 63-67).

Consider claim 12, as applied to claim 8. Urien, as modified by Maillard et al.,

discloses a protocol wherein the steps of writing into each participant equipment item

and/or each reciprocal participant equipment item are implemented by transmitting

messages for managing access rights (Urien, column 2 lines 37-45).

Consider claim 13, as applied to claim 8. Urien, as modified by Maillard et al.,

discloses a protocol wherein, for an authentication procedure between a descrambling

terminal, serving as a participant equipment item, and a card, serving as a reciprocal

participant equipment item, comprising a strong authentication level, an intermediate

authentication level and a zero authentication level, said protocol consists, in

accordance with the achieved authentication level and as a function of the identity of

said reciprocal participant equipment terminal: for an achieved strong authentication

level, in authorizing an access mode by impulse buying; for an achieved intermediate

authentication level, corresponding to a strong authentication level that has not been

achieved, but to the displaying of a user code for the reciprocal participant equipment

that has been achieved, in authorizing the processing of all of the management

messages and of all of the access control messages apart from the access mode by

impulse buying; and for a zero authentication level, corresponding to a strong

authentication level that has not been achieved, and to the displaying of a user code for

the reciprocal participant equipment that has not been achieved, in authorizing the

processing of the individual management messages (Maillard et al., paragraph 0098).

Consider claim 14, as applied to claim 1. Urien, as modified by Maillard et al.,

discloses a protocol wherein, for a set of N equipment items connected in a network and

each capable of executing an interactive dialogue with another equipment item of this

set of equipment items, said protocol consists: in attributing, to one equipment item, the

role of participant equipment item for all of the transactions, by transmitting a query

message to another equipment item of said set of equipment items; in attributing, to this

other equipment item, for this transaction, the role of reciprocal participant equipment

item; in attributing, to said equipment item, the role of reciprocal participant for all other

transactions, separate from this transaction, on receipt, by means of said equipment

item, of a query message issuing from another equipment item that is separate from

said set of equipment items; in attributing, to said other, separate equipment item, the

role of participant equipment item for said other transaction; in applying said protocol

between any equipment items, any other equipment items, and any other equipment

items that are separate from said set of equipment items, to which the role of participant

equipment item and/or the role of reciprocal participant equipment item has been

attributed, which allows a suitable interactive dialogue to be executed between any

equipment items of this set of equipment items by means of pairs of equipment items, to

which the roles of participant and reciprocal participant, respectively, have been

attributed (Urien, column 8 lines 30-38).

Consider claim 22. Urien discloses computer equipment item comprising

input/output means allowing messages to be transmitted and/or received in an

interactive dialogue with another computer equipment item (Maillard et al., paragraph

0088), calculation means connected to said input/output means, a working random

access memory and at least one programmable, non-volatile memory (Urien, column 3

lines 35-54), wherein said item comprises, written in the non-volatile memory, at least: a

list of computer equipment item identifiers, accessible via said input/output means; a list

of behavior identifiers defined in said interactive dialogue; at least one list of

associations between an equipment identifier and a behavior identifier (Urien, column 8

lines 30-65 and Maillard et al., paragraph 53).

Consider claim 23, as applied to claim 22. Urien discloses computer equipment

item comprising a security processor and means for authenticating any computer

equipment item considered for executing an interactive dialogue with said computer

equipment item (Urien, column 6 lines 6-16).

Consider claim 24, as applied to claim 22. Urien, as modified by Maillard et al., discloses a computer equipment item wherein said item comprises means for processing the following lists: a list of equipment identifiers, a list of behavior identifiers and a list of associations between an equipment identifier and a behavior identifier (Maillard et al. paragraph 0292 and Urien column 11 lines 63-67).

6.   Claims 15-16 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urien (US 7130910 B2) in view of Maillard et al. (US 20020129249 A1) and in further view of Alve et al. (US 20030196089 A1).

Consider claim 15, as applied to claim 1. Urien, as modified by Maillard et al., discloses a protocol comprising means for processing the following lists: a list of equipment identifiers, a list of behavior identifiers and a list of associations between an equipment identifier and a behavior identifier. However, Urien, as modified by Maillard et al., fails to disclose a protocol wherein a subset of participants are queried. Alve et al. discloses a method for key distribution and network connectivity, wherein, for a set of N equipment items connected in a network and each capable of executing an interactive dialogue with another equipment item of this set of equipment items, said protocol consists: in attributing, to one equipment item, the role of participant equipment item for all of the transactions, by transmitting a query message to a plurality of other equipment items, forming a subset of said set of equipment items; in attributing, to each of said other equipment items to which said query message is addressed, for this transaction,

the role of reciprocal participant equipment item, relative to said participant equipment

item; in applying said protocol between this equipment item, to which the role of

participant equipment item has been attributed, and each of the other equipment items

of this subset of said set of equipment items, said protocol comprising, at said

participant equipment item: a procedure of authentication between said participant

equipment item and each of said other equipment items of this plurality of other

equipment items, to which the role of reciprocal participant has been attributed, and, as

a function of the result of each authentication procedure, a procedure for distinguishing

the behavior of said participant equipment item relative to each of said other equipment

items of this plurality of other equipment items, to which the role of reciprocal participant

equipment item has been attributed, and a procedure for determining the common

behavior of said participant equipment item relative to each of said other equipment

items of this plurality of other equipment items, to which the role of reciprocal participant

equipment item has been attributed, which allows said common behavior of any

equipment items of this set of equipment items to be applied relative to the other

equipment items of this plurality of other equipment items, forming a subset of said set

of equipment items (paragraph 0027).

Therefore, it would have been obvious for a person of ordinary skill in the art at

the time the invention was made to incorporate a method for key distribution and

network connectivity, wherein, for a set of N equipment items connected in a network

and each capable of executing an interactive dialogue with another equipment item of

this set of equipment items, said protocol consists: in attributing, to one equipment item,

the role of participant equipment item for all of the transactions, by transmitting a query

message to a plurality of other equipment items, forming a subset of said set of

equipment items; in attributing, to each of said other equipment items to which said

query message is addressed, for this transaction, the role of reciprocal participant

equipment item, relative to said participant equipment item; in applying said protocol

between this equipment item, to which the role of participant equipment item has been

attributed, and each of the other equipment items of this subset of said set of equipment

items, said protocol comprising, at said participant equipment item: a procedure of

authentication between said participant equipment item and each of said other

equipment items of this plurality of other equipment items, to which the role of reciprocal

participant has been attributed, and, as a function of the result of each authentication

procedure, a procedure for distinguishing the behavior of said participant equipment

item relative to each of said other equipment items of this plurality of other equipment

items, to which the role of reciprocal participant equipment item has been attributed,

and a procedure for determining the common behavior of said participant equipment

item relative to each of said other equipment items of this plurality of other equipment

items, to which the role of reciprocal participant equipment item has been attributed,

which allows said common behavior of any equipment items of this set of equipment

items to be applied relative to the other equipment items of this plurality of other

equipment items, forming a subset of said set of equipment items as taught by Alve et

al. with a protocol comprising means for processing the following lists: a list of

equipment identifiers, a list of behavior identifiers and a list of associations between an

equipment identifier and a behavior identifier as taught by Urien, as modified by Maillard et al., for the purpose of query execution in smartcard technology.

Consider claim 16, as applied to claim 15. Urien, as modified by Maillard et al. and Alve et al., discloses a protocol wherein, for a behavior of said participant equipment item relative to each of said other reciprocal participant equipment items, formed by a list of elementary behaviors of this participant equipment item, said procedure for determining the common behavior consists in calculating the list resulting from the intersection of said lists of elementary behaviors (Maillard et al., paragraph 0053 and Urien column 5 lines 33-35).

Consider claim 18, as applied to claim 1. Urien, as modified by Maillard et al. and Alve et al., discloses a protocol wherein, for a set of N equipment items connected in a network and each capable of executing an interactive dialogue with another equipment item of this set of equipment items, said protocol consists: in attributing, to one equipment item, the role of participant equipment item for all of the transactions, by transmitting a query message to a plurality of other equipment items, forming a subset of said set of equipment items; in attributing, to each of said other equipment items to which said query message is addressed, for this transaction, the role of reciprocal participant equipment item, relative to said participant equipment item; in applying said protocol between this equipment item, to which the role of participant equipment item

has been attributed, and each of the other equipment items of this subset of said set of

equipment items, to which the role of reciprocal participant equipment item has been

attributed, said protocol comprising, at said participant equipment item: a procedure of

authentication of each of said other equipment items, to which the role of reciprocal

participant equipment item has been attributed, and, as a function of the result of this

authentication procedure, each of said other equipment items, to which the role of

reciprocal participant equipment item has been attributed, being capable, individually, of

executing an interactive dialogue with said equipment item, to which the role of

participant equipment item has been attributed, a joint procedure of authentication of the

subset of the reciprocal participant equipment items relative to said participant

equipment item, and, as a function of the result of this joint authentication procedure,

the subset of said reciprocal participant equipment items being authenticated as a joint

reciprocal participant for the execution of said transaction, a joint procedure for

authorizing the subset of the reciprocal participant equipment items to execute the

interactive dialogue relative to said participant equipment item and, once the joint

authorization procedure has been achieved, a procedure for distinguishing the joint

behavior of said participant equipment item relative to the subset of the reciprocal

participant equipment items, to which the role of joint reciprocal participant has been

attributed, and, once the distinguishing procedure has been achieved, a procedure for

determining and applying the joint behavior of said participant equipment item relative to

said other equipment items, to which the role of joint reciprocal participant has been

attributed, which allows said joint behavior of any equipment items of this set of

equipment items to be applied relative to all of the plurality of equipment items, to which

the role of joint reciprocal participant has been attributed (Alve et al., paragraph 0023).

Consider claim 19, as applied to claim 18. Urien, as modified by Maillard et al.

and Alve et al., discloses a protocol wherein said joint authentication procedure consists

in verifying to its true value the logical product of the logical values that are

representative of each reciprocal authentication procedure (Urien, claim 16).

Consider claim 20, as applied to claim 18. Urien, as modified by Maillard et al.

and Alve et al., discloses a protocol wherein said joint authorization procedure consists:

in establishing, from said list of identifiers of reciprocal participant equipment items,

written into said participant equipment item, a composed identifier formed by the

identifier of the reciprocal participant equipment items authorized to participate in said

transaction and approved as identifiers of reciprocal participant equipment items, for

which the joint authentication procedure has been verified to the true value, relative to

the participant equipment item (Alve et al., paragraph 0020).

Consider claim 21, as applied to claim 20. Urien, as modified by Maillard et al.

and Alve et al., discloses a protocol wherein said procedure for distinguishing the joint

behavior of said participant equipment item relative to the subset of the reciprocal

participant equipment items consists: in selecting the association between the

composed identifier and a behavior identifier in said participant equipment item; in

calling, from the composed identifier, the behaviors defined in the list of associations

(Maillard et al. paragraph 0053 and Urien column 5 lines 33-35).

7.   Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Urien

(US 7130910 B2) in view of Maillard et al. (US 20020129249 A1) in further view of Alve

et al. (US 20030196089 A1) and in further view of Arkin et al. (US 20020152262 A1).

        Consider claim 17, as applied to claim 15. Urien, as modified by Maillard et al.

and Alve et al., discloses a protocol comprising means for processing the following lists:

a list of equipment identifiers, a list of behavior identifiers and a list of associations

between an equipment identifier and a behavior identifier, wherein a subset of

participants are queried. However, Urien, as modified by Maillard et al. and Alve et al.,

fails to disclose calculating a list resulting from the union of lists of elementary

behaviors. Arkin et al. discloses a method for preventing the infringement of intellectual

property rights, wherein, for a behavior of said participant equipment item relative to

each of said other reciprocal participant equipment items, formed by a list of elementary

behaviors of this participant equipment item, said procedure for determining the

common behavior consists in calculating the list resulting from the union of said lists of

elementary behaviors (paragraphs 0015-0016).

Therefore, it would have been obvious for a person of ordinary skill in the art at the time the invention was made to incorporate a method for preventing the infringement of intellectual property rights, wherein, for a behavior of said participant equipment item relative to each of said other reciprocal participant equipment items, formed by a list of elementary behaviors of this participant equipment item, said procedure for determining the common behavior consists in calculating the list resulting from the union of said lists of elementary behaviors as taught by Arkin et al. with a protocol comprising means for processing the following lists: a list of equipment identifiers, a list of behavior identifiers and a list of associations between an equipment identifier and a behavior identifier, wherein a subset of participants are queried as taught by Urien, as modified by Maillard et al. and Alve et al., for the purpose of calculating behavior in smartcard technology.

Response to Arguments

8.   Applicant's arguments filed 14 November 2008 with respect to claims 22-23 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that for Claims 1-21 and 24, the "decryption key" of Malliard does not constitute and cannot be read as a "behavior identifier" that is relevant in an interactive dialog between a "participant computer equipment item" and a "reciprocal participant computer equipment item," as recited in claim 1.

Examiner respectfully disagrees. Maillard et al. teaches the claimed elements of
behavior identifiers (decryption keys), and interactive dialog between a participant
computer equipment item and a reciprocal participant computer equipment item (("An
interactive system 4000, also connected to the multiplexer 2004 and the
receiver/decoder 2020 and again located partly in the broadcast centre and partly in the
decoder, enables the end user to interact with various applications via a modemmed
back channel 4002.") paragraph 0088 ("Various specific types of EMM are used in
putting the present invention into practice. Individual EMMs are dedicated to individual
subscribers, and are typically used in the provision of Pay Per View services; these
contain the group identifier and the position of the subscriber in that group. So-called
"Group" subscription EMMs are dedicated to groups of, say, 256 individual users, and
are typically used in the administration of some subscription services. This EMM has a
group identifier and a subscribers' group bitmap. Audience EMMs are dedicated to
entire audiences, and might for example be used by a particular operator to provide
certain free services. An "audience" is the totality of subscribers having smartcards
which bear the same Operator Identifier (OPI). Finally, a "unique" EMM is addressed to
the unique identifier of the smartcard. The structure of a typical EMM is now described
with reference to FIG. 3. Basically, the EMM, which is implemented as a series of digital
data bits, comprises a header 3060, the EMM proper 3062, and a signature 3064. The
header 3060 in turn comprises a type identifier 3066 to identify whether the type is
individual, group, audience or some other type, a length identifier 3068 which gives the

length of the EMM, an optional address 3070 for the EMM, an operator identifier 3072

and a key identifier 3074. The EMM proper 3062 of course varies greatly according to

its type. Finally, the signature 3064, which is typically 8 bytes long, provides a

number of checks against corruption of the remaining data in the EMM.") paragraphs

0114-0115 ("With reference to FIG. 9, a typical subscription EMM proper (that is,

ignoring the header and signature) generated by the above procedure comprises the

following main portions, namely typically a 256 bit subscription (or subscribers' group)

bitmap 3152, 128 bits of management ciphering keys 3154 for the ciphering of the

EMM, 64 bits of each exploitation ciphering key 3156 to enable the smartcard 3020 to

decipher a control word to provide access to broadcast programmes, and 16 bits of

obsolescence date 3158 to indicate the date beyond which the smartcard will ignore the

EMM. In fact in the preferred embodiment three exploitation keys are provided, one set

for the present month, one set for the next month, and one for resume purposes in the

event of system failure. In more detail, the group subscription EMM proper has all of the

above components, except the management ciphering keys 3154. The commercial offer

subscription EMM proper (which is for an individual subscriber) includes instead of the

full subscribers' group bitmap 3152 the group ID followed by the position in the group,

and then management ciphering keys 3154 and three exploitation keys 3156, followed

by the relevant obsolescence date 3158. The Message Generator 3106 serves to

transform commands issued by the STM server 3104 into EMMs for passing to the

Message Emitter 3302. With reference to FIG. 5, firstly, the MG produces the EMMs

proper and passes them to the Ciphering Unit 3008 for ciphering with respect to the

management and exploitation keys. The CU completes the signature 3064 on the EMM

(see FIG. 3) and passes the EMM back to the MG, where the header 3060 is added.

The EMMs which are passed to the Message Emitter are thus complete EMMs. The

Message Generator also determines the broadcast start and stop time and the rate of

emission of the EMMs, and passes these as appropriate directions along with the

EMMs to the Message Emitter. The MG only generates a given EMM once; it is the ME

which performs its cyclic transmission.") paragraphs 0144-0146).

Conclusion

9.   Any response to this Office Action should be faxed to (571) 273-8300 or mailed

to:

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P.O. Box 1450
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           Hand-delivered responses should be brought to

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                   Alexandria, VA 22314

     Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Mark Fearer whose telephone number is (571) 270-

1770. The Examiner can normally be reached on Monday-Thursday from 7:30am to

5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Tonia Dollinger can be reached on (571) 272-4170. The fax phone number

for the organization where this application or proceeding is assigned is (571) 273-

8300.

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Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist/customer service whose telephone

number is (571) 272-2600.

Mark Fearer
/M.D.F./
January 29, 2009

/George C Neurauter, Jr./

Primary Examiner, Art Unit 2443